

Sanket Gautam

Software Engineer

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SUMMARY

Software engineer with 8 years of experience at Amazon building large-scale distributed systems and agentic AI platforms, across Alexa AI, Buy with Prime, Amazon Global Selling, and Selling Partner Services. MS in Computer Science, University of Washington's Paul G. Allen School (Jun 2026, 3.9 GPA). Led cross-team initiatives spanning 12+ engineers; focused on multi-agent systems, platform engineering, and developer tools that multiply team impact. Active mentor, hackathon judge, and speaker.

EXPERIENCE

Software Development Engineer II · Amazon Jul 2020 – Present

Selling Partner Services · Seattle, WA 2022 – Present

- Designed and deployed **Spectrum Assistant**, the organization's first production agentic AI system (AWS AgentCore, MCP protocol); led end-to-end from PRFAQ through security certification.
- Won **People's Choice Award** at Spectrumathon 2025 for Project Panacea, a multi-agent AI system for partner lifecycle management built on AWS Bedrock.
- Delivered an organization-wide Agentic AI Learning Series: 40 live attendees and **160+ views** via internal broadcast; enabled 2 intern AI projects.
- Led the **Seller Central Embedded Apps launch** across 4 teams; architected the Embedded SDK (data exchange, auth, telemetry) and shipped the Intuit QuickBooks integration with PKCE OAuth, the first major third-party app.
- Defined and executed the Entity Qualification Service migration across 3 technology stacks with **zero incidents**; resolved a CLI-tools blind spot coordinating 6+ teams (**Leadership Principles Award, Q4 2023**).
- Prevented **39+ potential SEV2 incidents** via proactive investigation; resolved issues affecting 180+ selling-partner providers.

Buy with Prime (Returns) · Hyderabad, India 2022

- Led the Operational Readiness Review for the **Buy with Prime Returns 1.0 launch**: 3 teams, 12+ engineers, 15 systems, 120+ technical requirements.
- Designed end-to-end asynchronous architecture for returns event processing spanning 4 services and 7 fulfillment scenarios.
- Authored reusable design guidance (DNS health checks, request tracing, monitoring dashboards) adopted by peer teams.

Alexa Data Services (Alexa AI) · Hyderabad, India Jul 2020 – 2022

- Designed a headless transformation layer for the Alexa data-labeling platform, cutting new-customer onboarding from **60 days to under 10**.
- Eliminated ~2 hours of recurring monthly downtime in a legacy ML task-routing system through heap-memory analysis across distributed EC2 fleets.
- Mitigated HIPAA/PHI privacy risks in Alexa data-labeling systems; designed a staged rollout strategy across two labeling platforms.

Software Development Engineer · Amazon Jul 2018 – Jul 2020

Amazon Global Selling / Selling Partner Network · Hyderabad, India

- Built search for Amazon Build International Listings on Elasticsearch, serving **1M+ product offers** for thousands of global sellers.
- Implemented an SSO-like migration experience moving sellers from the legacy SPN site to Seller Central, integrating AuthN and AuthZ with marketplace authorization.
- Developed configurable two-level distributed caching with exponential backoff and jitter for currency conversion.

EARLIER ROLES

SDE Intern, Amazon Global Selling, Hyderabad May – Jul 2017
Prototyped a Seller-Provider Communication Tool; automated post-launch localization testing with Selenium.

Technical Trainee, DRDO (NRMA), Jodhpur Dec 2016 – Jan 2017
Researched FFT optimizations for CT image reconstruction under Dr. D.K. Tripathi (Scientist 'F').

Chatbot Developer Intern, elth.ai Jul – Sep 2016
Built core features (symptom assessment, appointment booking) for a medical chatbot serving 100+ hospitals.

EDUCATION

MS, Computer Science · Paul G. Allen School Sep 2023 – Jun 2026
University of Washington, Seattle · GPA 3.9/4.0

- **Lumora AI**: built an AI CRM platform for wealth managers; pitched to 16 VCs at Pioneer Square Labs; featured in GeekWire.
- Coursework: NLP, Human-Computer Interaction, Distributed Systems, Network Systems, Software Entrepreneurship.

BTech, Computer Science & Engineering Jul 2014 – May 2018
Maulana Azad National Institute of Technology (NIT), Bhopal · GPA 3.4/4.0

PROFESSIONAL ACTIVITIES & LEADERSHIP

Judge, LA Hacks 2026 (UCLA) Apr 2026
Evaluated 14 projects at one of the largest collegiate hackathons in the U.S.

Mentor & Judge, DubHacks '25 (University of Washington) Oct 2025
Guided student teams at the Pacific Northwest's largest collegiate hackathon (500+ participants).

Mentor, GEN1 CSE Community (University of Washington) 2024 – Present
Mentor first-generation undergraduate CS students on careers and interview preparation.

Security Certifier, Amazon Information Security Oct 2020 – Present
Certified launches incl. Amazon Go Brand Analytics Portal and Vendor iOS app; identified 2 critical vulnerabilities.

Mentor, Technovation Idea Innovation Lab (UNESCO) Jul – Aug 2020
Mentored underprivileged young women (ages 10–18) across Asia in ML and technology.

Member, IEEE 2026 – Present
Professional member, building on undergraduate involvement leading the MANIT IEEE student branch.

Event Head, IEEE Student Branch (MANIT Bhopal) 2017 – 2018
Led a 4-developer team for national and international events; ran recruiting.

Speaker, organization-wide technical talks at Amazon 2020 – Present
Agentic AI learning series, code smells & refactoring, securing API Gateway endpoints, Scala for integration tests.

AWARDS & RECOGNITION

- **People's Choice Award, Spectrumathon 2025**: Project Panacea, multi-agent AI system
- **Leadership Principles Award, Amazon Q4 2023**: CLI-tools migration strategy
- **Awesome Amazonian Award, 2020**: Sustained contributions at Amazon
- **UW Allen School Feature**: First-generation student spotlight, Nov 2025
- **Top 20, Hack In the North 2.0 (2018)**: Selected for startup incubation

TECHNICAL SKILLS

Languages: Java, Python, JavaScript/TypeScript, Scala, SQL

AI / ML: Agentic AI & multi-agent systems, MCP, AWS Bedrock & AgentCore, LLMs, NLP, PyTorch

Cloud & Infra: AWS (Lambda, Step Functions, DynamoDB, S3), CDK, Docker, Kubernetes

Systems & Security: Distributed systems, event-driven architecture, API design, Elasticsearch, threat modeling, OAuth/PKCE